



RIVERSTONE CONNECTION STUDY

Task Force Meeting #2
January 29, 2013



Agenda

- Introductions
- Task Force Meeting #1 Synopsis
- Connection Options
- Initial Model Results
- Intersection and Roadway Treatments
- Evaluation Matrix
- Task Force Feedback
- Summary



Task Force Meeting #1 Synopsis

- December 20, 2012
 - Attended by 11 members and one elected official
- Task Force Feedback
 - Connection should have least impact on current residents
 - Reduce traffic cut-through & speeds, and maintain quality of life
 - Study should respond to community concerns
 - Limited positive outcomes as a result of this connection
 - Minimize additional traffic on Palm Royale
 - University Blvd – would it or can it serve as an alternate route
 - Peak period traffic operations at many locations are problematic
 - Find a mutually acceptable solution through consensus
- Publicize study and provide constituent feedback
 - Members were tasked to follow up with residents and request input regarding concerns, suggestions and ideas



Connection Options

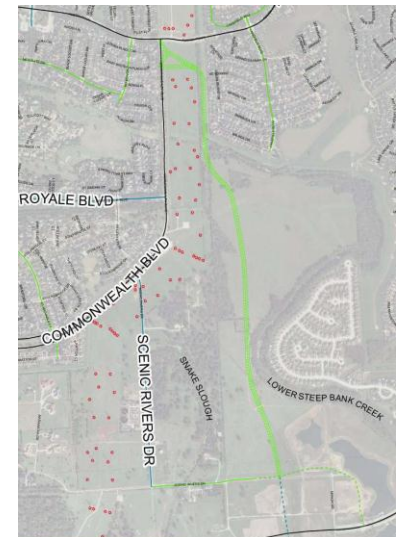
- Several feasible options considered
- List of seven possible connections
- Discussions with CPE, LID, and other utility owners
- Will refine intersection treatments and final alignment
- Traffic on LJ Parkway will grow with development
- Projected demand indicates need for a 4-lane roadway
- Provision for four lane cross-section across CPE ROW



Connection Options

- Option #1
 - Northernmost connection
 - Uses part of levee along Lakes of Austin Park for roadway
 - Will require construction of retaining wall and is expensive
 - Roadway will be elevated approximately 10 feet
 - Crossing CenterPoint Energy transmission line is still difficult
 - Significant maintenance costs for the City
 - Possible neighborhood concerns

- Fatal flaws include: Excessive Cost, Impacts to Existing Neighborhoods, Noise, Maintenance





Connection Options

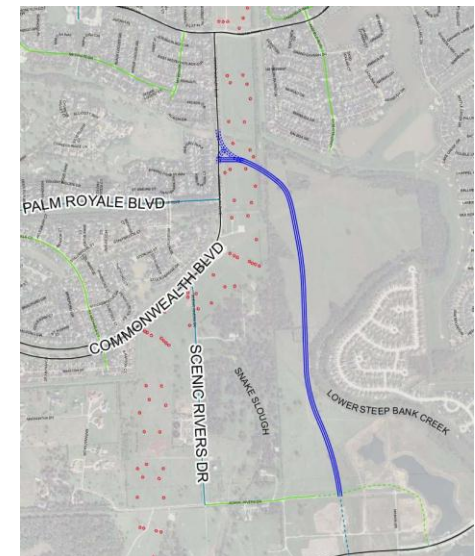
- Option #2
 - Approximately 1000 feet south of Austin Parkway
 - Will require a diagonal crossing across CenterPoint ROW
 - Bridge or culvert crossing over creek
 - Some drainage implications
 - Roadway construction will be more expensive
 - Shifts majority of traffic flow away from Palm Royale





Connection Options

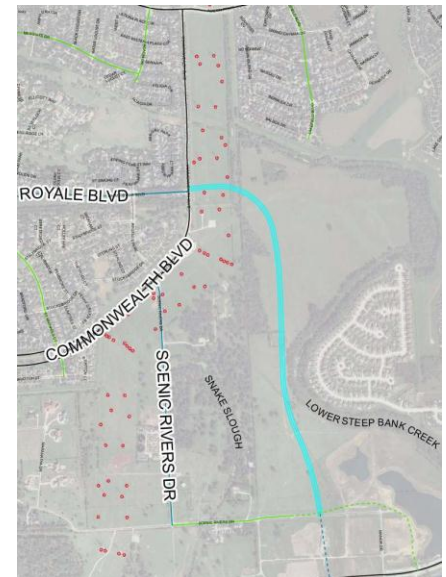
- Option #3
 - Connects approximately 600 feet north of Palm Royale
 - Most desirable of the options north of Palm Royale
 - Need to consider the sag of CenterPoint transmission line
 - Connection is south of creek and has no drainage concerns
 - Shifts majority of traffic flow away from Palm Royale
 - No additional increase in traffic anticipated along Palm Royale





Connection Options

- Option #4
 - Connects at Palm Royale
 - Creates a standard 4-legged intersection
 - Proximity to electric towers requires skewed westbound approach
 - Levee on south leg may cause sight distance concerns
 - Approximately one-fourth of projected traffic on Connection will continue straight along Palm Royale
 - Significant increase in traffic is anticipated for Palm Royale





Connection Options

- Option #5

- Connects approximately 600 feet south of Palm Royale
- Intersects at a curve on Commonwealth Blvd
- Levee on north leg may cause sight distance concerns
- Sag of CenterPoint transmission lines are a major consideration
- Does not reduce the cut-through potential for Palm Royale
- Approximately 20% of Connection traffic may use Palm Royale
- Significant increase in traffic is anticipated for Palm Royale





Connection Options

• Option #6

- Connects at Commonwealth and Scenic Rivers intersection
- Intersection configuration is a challenge
- Reduces the effectiveness of Scenic Rivers as an alternate route
- Need to consider the sag of CenterPoint transmission line
- Does not reduce the cut-through potential for Palm Royale
- Significant increase in traffic is anticipated for Palm Royale
- Overall mobility for the area is not enhanced



- Fatal flaws include: Incompatible with Riverstone land use plan, May not meet the intent of Riverstone Agreement, Intersection configuration limitations, and Does not improve overall mobility



Connection Options

- Option #7
 - Connects at Scenic Rivers Drive
 - May not serve the functional requirements for LJ Parkway
 - Does not reduce the cut-through potential of Palm Royale
 - Significant increase in traffic is anticipated for Palm Royale
 - Need to consider the sag of CenterPoint transmission line
 - Increases traffic along Scenic Rivers and at the Commonwealth intersection
 - Overall mobility for the area is not improved
- Fatal flaws include: Does not meet the intent of Riverstone Agreement, and Overall mobility is not improved





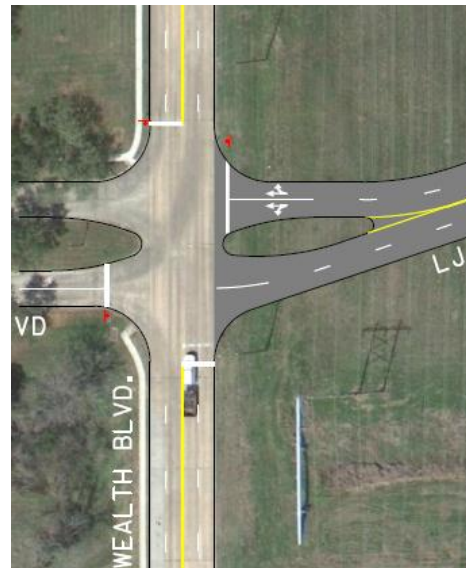
Initial Model Results

- Impact to Palm Royale is noticeable within the options
 - North connections decrease Palm Royale traffic projection
- Demand for two roadway connections to Commonwealth
 - Riverstone Connection required for north/south mobility
 - 4-lane roadway will be needed to meet demand into and out of Riverstone area for the Year 2035
 - Projected traffic demand for this connection to serve both University and Riverstone
 - Scenic Rivers will need roadway improvements
 - Minimum 2-lane roadway is required for Scenic Rivers by Year 2035
 - Majority of increased traffic demand on Scenic Rivers is from west along Commonwealth.

Intersection & Roadway Treatments



- Standard 3-leg or 4-leg intersections
 - Stop Sign Controlled or Signalized
 - Exclusive Left-Turn and Right-Turn Lanes
 - Channelized Islands and Pedestrian Refuges
 - Traffic operations and safety enhancements possible



Intersection & Roadway Treatments



- Modern Roundabouts

- Efficient and generally operates better than signals and stop signs
- Can be designed to reflect character of study area
- Lower speeds and crash rates
- More pedestrian and bicyclist friendly



Intersection & Roadway Treatments



- Roundabout Concepts for Connection at Commonwealth
 - North Connection



Intersection & Roadway Treatments



- Roundabout Concepts for Connection at Commonwealth
 - [Palm Royale Connection](#)



Intersection & Roadway Treatments



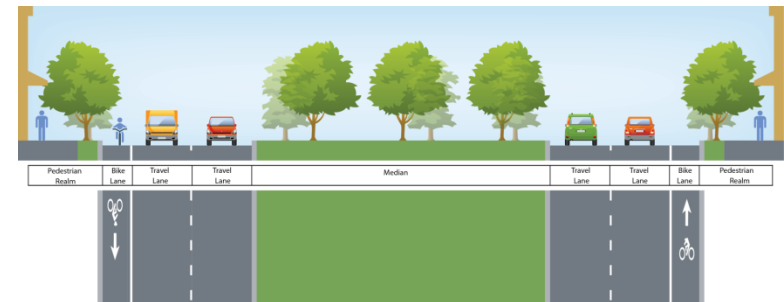
- Roundabout Concepts for Connection at Commonwealth
 - South Connection
















































Intersection & Roadway Treatments

- Roadway Design
 - Context Sensitive Streets Design
 - Accommodate a Range of Transportation Modes
 - Safe Environment for Bicyclists and Pedestrians
 - Potential for Green Streets and Low Impact Design



Evaluation Matrix



Option	Cost	Maintenance	Poor Noise/ Visual	Palm Royale Traffic	CPE Line	Drainage Levee	ROW	Design	Satisfies Agreement
1	\$\$\$	\$\$\$	  		 	  	\$\$	  	Yes
2	\$\$	\$\$			 	 	\$	 	Yes
3	\$	\$					\$		Yes
4	\$	\$		  	  		\$	 	Yes
5	\$	\$	 	  	 		\$\$	 	Yes
6	\$\$	\$	 	  			\$\$\$	 	Maybe
7	\$\$	\$	 	  			\$\$\$		No



Task Force Feedback on Options

- Option #1, #6, and #7 have fatal flaws
 - Comments before closing these options for further consideration
- Four viable options still under evaluation
- Option #2, #3, #4, and #5
 - Objective is to identify top two favorites
 - Options #2 and #3 are north of Palm Royale
 - Option #4 is at Palm Royale and Option #5 is south
 - Comment cards available for listing Pro's and Con's



Summary

- Listened to Task Force Meeting #1 Comments
 - Least impact on current residents
 - Reduce cut through traffic
 - Maintain quality of life and property values
 - Consider traffic safety and minimize congestion
- Identified 4 options that met objectives to varying extent
 - North options address the Task Force concerns the best
 - Shortlist two options for detailed evaluation
- Develop roadway character and intersection treatments
 - Context Sensitive Solution/ Complete Streets
 - Design that enhances neighborhood and property values
 - Safe, functional, and aesthetically pleasing